

REMARKS

The present Amendment amends claims 1, 2 and 4-6 and cancels claim 3. Therefore, the present application has pending claims 1, 2 and 4-6. All claims are now believed to be in condition for allowance.

In the Office Action, the Examiner rejected claim 6 under 35 U.S.C. § 112 as being indefinite and rejected Claims 1, 2 and 6 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 4 and 5 were found to be allowable but were objected to as being dependent upon a rejected base claim.

With respect to the rejection of Claim 6 under § 112, the Examiner took the position that Claim 6 failed to recite structural limitations to define the claim apparatus. Claim 6 has now been amended to clearly recite the required structural limitations of an apparatus claim. Therefore, reconsideration and withdrawal of this rejection is respectfully requested.

With respect to the rejection of claims 1, 2 and 6 under § 101, the Examiner took the position that these claims implement a method of calculation where the inputs are numbers and the outputs also are numbers. Thus, in the Examiner's view, such claims have no practical application as they do not transform an article to a different state or produce a useful, concrete and tangible result. Applicants respectfully disagree with the Examiner's position. Claims 1, 2 and 6 have been amended to make clearer that these claims are directed to statutory subject matter.

Claims 1 and 2 recite specific storing, reading and calculating steps. None of these steps, when taken alone or in combination, foreclose from the

public the use of any mathematical algorithm or formula. The recited steps merely describe the information processing method of the claims. When practiced, these steps achieve the useful and tangible result of calculating $x \cdot (2^n) \bmod P$ for an input value x that is larger than a prime number P .

As the Patent Office "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", cited by the Examiner, makes clear:

"While abstract ideas, natural phenomena, and laws of nature are not eligible for patenting, methods and products employing abstract ideas, natural phenomena, and laws of nature to perform a real-world function may well be." [Page 17, last paragraph – Emphasis Added]

The Guidelines go on to state:

"In evaluating whether a claim meets the requirements of section 101, the claim must be considered as a whole to determine whether it is for a particular application of an abstract idea, natural phenomenon, or law of nature, rather than for the abstract idea, natural phenomenon, or law of nature itself." [Page 17, last paragraph. – Emphasis Added]

When claims 1 and 2 are considered as a whole, the conclusion is inescapable that the claims are directed to an application of, rather than, a mathematical algorithm itself.

Thus, the rejection of claims 1 and 2 as being directed to non-statutory subject matter is improper and should be reconsidered and withdrawn.

Claim 6 is an apparatus claim in which one of the apparatus limitations is described by method steps. As with claims 1 and 2, the statutory subject matter of claim 6 become clear when the claim is viewed as a whole under the

analysis set forth in the Guidelines. Thus, the rejection of claim 6 under § 101 also is improper and should be reconsidered and withdrawn as well.

In view of the foregoing amendments and remarks, Applicants submit that all pending claims in this application are in condition for allowance. Accordingly, an early indication of such allowance is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.42884X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

A handwritten signature in black ink, appearing to read 'Carl I. Brundidge', is written over a horizontal line.

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